

## **IMPLEMENTATION SCHEDULE**

The Implementation Schedule that follows describes recovery task priorities, task numbers, task descriptions, duration of tasks, potential or participating responsible parties, total cost estimate, estimates for the next five years, if available, and comments. These tasks, when accomplished, are expected to lead to recovery of bull trout in the Snake River Washington Recovery Unit. Costs estimates are not provided for tasks that are normal agency responsibility under existing authorities.

Most recovery measures for bull trout and bull trout habitat fall under the categories of “research and monitoring,” “protection,” and “restoration.” The Snake River Washington Recovery Unit Team emphasizes the need to expedite the implementation of population studies that will provide information to fill numerous data gaps for bull trout in both the Tucannon River and Asotin Creek Core Areas. In addition, it will be important to simultaneously implement recovery measures to protect existing tributary populations and the diverse habitats essential to their survival. The Snake River Washington Recovery Unit Team acknowledges that many restoration activities will be necessary to recover bull trout throughout the Snake River Washington Recovery Unit. Therefore, the Snake River Washington Recovery Unit Team developed recovery criteria for selecting the streams that should receive the highest priority for restoration and recovery activities. In addition, the Snake River Washington Recovery Unit Team identified the mainstem reaches of the Tucannon River and Asotin Creek as waterbodies that should also be high priorities for restoration and recovery activities. It is important to note that some restoration activities may take many years to complete (10 to 20 years) and, in some cases, even more time will be required before populations respond to improved conditions. Therefore, implementing priority recovery tasks as early as possible is important.

Parties with authority, responsibility, or expressed interest in implementing a specific recovery task are identified in the Implementation Schedule. Listing a responsible party does not imply that prior approval has been given or require that party to participate or expend any funds. However, willing participants may be able to increase their funding opportunities by demonstrating that their budget submission or funding request is for a recovery task identified in an approved recovery plan and

is, therefore, part of a coordinated effort to recover bull trout. In addition, section 7 (a)(1) of the Endangered Species Act directs all Federal agencies to use their authorities to further the purposes of the Act by implementing programs for the conservation of threatened or endangered species.

Following are definitions to column headings and keys to abbreviations and acronyms used in the Implementation Schedule:

Priority Number: All priority 1 tasks are listed first, followed by priority 2 and priority 3 tasks.

Priority 1: All actions that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.

Priority 2: All actions that must be taken to prevent a significant decline in species population or habitat quality or to prevent some other significant negative effect short of extinction.

Priority 3: All other actions necessary to provide for full recovery (or reclassification) of the species.

Task Number and Task Description: Recovery tasks as numbered in the recovery outline. Refer to the action narrative for task descriptions.

Task Duration: Expected number of years to complete the corresponding task.

Study designs can incorporate multiple tasks, which, when combined, may reduce the time needed for completion.

Responsible or Participating Party: The following organizations are those with responsibility or capability to fund, authorize, or carry out the corresponding recovery task.

Federal agencies:

EPA	Environmental Protection Agency
FHA	Federal Highway Administration
NMFS	National Marine Fisheries Service
NRCS	Natural Resources Conservation Service
USACE	U.S. Army Corps of Engineers
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

State agencies:

WDFW	Washington Department of Fish and Wildlife
WDOE	Washington Department of Ecology
WDNR	Washington Department of Natural Resources
WDOT	Washington Department of Transportation

Others:

ACCD	Asotin County Conservation District
BPA	Bonneville Power Administration
CCD	Columbia County Conservation District
CCWB	Columbia County Weed Board
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
GCCD	Garfield County Conservation District
NGO	Nongovernmental agencies
PCD	Pomeroy Conservation District
SRFB	Salmon Recovery Funding Board

An asterisk (\*) indicates agency or agencies that have the lead role for task implementation and coordination, though not necessarily sole responsibility.

Cost Estimates: Cost estimates are rough approximations and provided only for general guidance. Total costs are estimated for the duration of the task and also itemized annually for the next five years.

An asterisk (\*) in the total cost column indicates ongoing tasks that are currently being implemented as part of normal agency responsibilities under existing authorities. Because these tasks are not being done specifically or solely for bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced funding levels and/or in only a small portion of the watershed.

Double asterisk (\*\*) in the total cost column indicates that estimated costs for these tasks are not determinable at this time. Input is requested to help develop reasonable cost estimates for these tasks.

Triple asterisk (\*\*\*) indicates costs are combined with or embedded within other related tasks.

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Tucannon River Core Area											
Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.1.1	Identify unstable and problem roads causing fine sediment delivery	25	CCD, GCCD, USFS, WDOT	10	10	-	-	-	-	Existing agency responsibilities; costs associated with non-agency lands
2	1.1.2	Move roads that are in riparian areas out of the floodplain or stabilize them	25	CCD, GCCD, USFS, WDOT	**	-	-	-	-	-	Existing agency responsibilities; costs unknown as each road may require different solutions
2	1.1.3	Find and eliminate fine sediment sources from historical roads	25	CCD, GCCD, USFS, WDOT	**	-	-	-	-	-	Existing agency responsibilities; costs unknown as each road may require different solutions
2	1.1.4	Improve routine road maintenance practices	25	CCD, GCCD, USFS, WDOT	*	-	-	-	-	-	Existing agency responsibilities
2	1.1.6	Reduce sediment inputs from recreational-based channel damage	25	USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Tucannon River Core Area											
Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.1.7	Develop and install educational watershed protection signs in riparian areas of State and Federal campgrounds	3	USFS, WDFW	5	5	-	-	-	-	
2	1.1.8	Review and act on recommendations generated from sediment monitoring plans	25	CCD, CTUIR, NRCS, PCD, USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities
2	1.1.9	Assess water quality and remedy impacts from individual residences and communities	25	CCD, WDOE	*	-	-	-	-	-	Existing agency responsibilities
2	1.1.12	Protect groundwater sources to maintain base flows in the Tucannon River	25	EPA, WDOE, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities;
2	1.1.13	Identify factors contributing to elevated stream temperatures	3	CCD, PCD, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities
2	1.2.1	Remove permanent and seasonal barriers to bull trout migration	25	CCD, PCD, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Tucannon River Core Area											
Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.2.2	Eliminate barriers to bull trout passage at remnant power and irrigation dams	5	CCD, WDFW, NRCS	*	-	-	-	-	-	Existing agency responsibilities
2	1.2.3	Conduct a complete inventory of surface water diversions	3	CCD, PCD, WDFW, WDOE	15	-	15	-	-	-	
2	1.3.1	Conduct watershed analyses to evaluate past, current, and future bull trout production potential	10	WDFW, USFS, USFWS	*	-	-	-	-	-	Focus on critical habitat and associated waters
2	1.3.2	Identify streambanks susceptible to excessive failure and mass wasting	25	CCD, PCD, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.3	Stabilize streambeds and banks	25	CCD, NRCS, PCD, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.4	Protect riparian and channel habitat at managed and unmanaged campgrounds, trail systems, and recreation sites	25	USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Tucannon River Core Area											
Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.3.6	Identify and restore riparian vegetation in priority streams	25	CCD, USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.8	Reduce fine sediment inputs from agricultural land	25	CCD, PCD, NRCS, WDOE	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.9	Maintain roadless conditions in sensitive bull trout watersheds	25	USFS	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.10	Evaluate bridge crossings and assess options to modify structures to protect migration corridors	3	CCD, GCCD, USFS, WDOT, FHA	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.12	Promote programs to restore and protect floodplain and channel function	25	CCD, PCD, NRCS, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.13	Identify and restore aggrading stream channels to restore flow and reduce subsurface flows and increase channel stability	25	CCD, PCD, NRCS, WDFW, WDOE, USFS	10	-	10	-	-	-	Surveys only



Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Tucannon River Core Area											
Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.3.15	Reduce stream temperatures by enhancing riparian areas	25	CCD, EPA, PCD, WDFW, WDOE, USFS	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.16	Reduce impacts of livestock on streams and riparian areas	25	CCD, PCD, USFS	*	-	-	-	-	-	Existing agency responsibilities
2	1.4.1	Implement bull trout identification protocol at juvenile and adult fishways at Lower Monumental, Little Goose, and Lower Granite Dams	25	USACE	*	-	-	-	-	-	Existing agency responsibilities
2	1.4.2	Review existing bull trout information and determine limiting factors affecting bull trout at Lower Monumental, Little Goose, and Lower Granite Dams	2	USACE, WDFW, USFWS	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Tucannon River Core Area											
Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.4.3	Identify study needs related to habitats for foraging, migrating, and overwintering in Snake River reservoirs	3	USACE, WDFW, USFWS	*	-	-	-	-	-	Costs covered by task 7.3.1
2	3.2.1	Reduce incidental harvest by outreach to anglers and increasing awareness of bull trout population status	25	WDFW	*	-	-	-	-	-	Existing agency responsibilities
2	3.2.2	Summarize existing bull trout bycatch data and implement angler interviews that target bull trout bycatch	25	WDFW	*	-	-	-	-	-	Existing agency responsibilities
2	3.2.3	Increase enforcement patrols during spawning periods	25	WDFW	15	5	-	5	-	5	
2	3.4.1	Continue bull trout harvest closure in the Snake River Washington Recovery Unit	25	WDFW	*	-	-	-	-	-	Existing agency responsibilities
2	4.1.1	Conduct genetic inventory	5	USFS, USFWS, WDFW	50	25	25	-	-	-	

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Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	4.1.2	Evaluate and describe the genetic structure of bull trout in local populations	5	USFS, USFWS, WDFW	5	-	5	-	-	-	
2	5.2.1	Conduct presence and absence surveys to fully describe the distribution of juvenile, subadult, and adult bull trout	3	USFS, WDFW	60	20	20	20	-	-	
3	1.1.10	Evaluate the need to install additional permanent stream gauging stations	2	WDFW, WDOE, USGS	10	10	-	-	-	-	Costs only for the study
3	1.3.5	Develop and implement comprehensive livestock grazing management plans	25	CCD, NRCS, PCD, USFS	*	-	-	-	-	-	Existing agency responsibilities
3	1.3.7	Evaluate legacy effects from two historical mines on Cummings Creek	3	USFS, WDOE	5	-	-	5	-	-	
3	1.3.11	Incorporate non-intrusive flood repair strategies	25	CCD, GCCD, FHA, USFS, WDOT	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Tucannon River Core Area											
Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	1.3.14	Investigate land acquisition from willing sellers as an opportunity to protect bull trout	25	USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities
3	1.3.17	Minimize further development in floodplains	25	CCD, PCD, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities
3	1.5.1	Assess effects of upland activities and current upland conditions on stream and riparian function	5	CCD, CCWB	*	-	-	-	-	-	Existing agency responsibilities
3	1.5.2	Assess current and historical effects of upland management on occupied bull trout streams	5	CCD, CCWB	*	-	-	-	-	-	Existing agency responsibilities
3	1.5.3	Investigate use of prescribed fire	5	USFS	*	-	-	-	-	-	Existing agency responsibilities
3	2.1.1	Evaluate potential impacts of hatchery rainbow trout	5	WDFW	*	-	-	-	-	-	Existing agency responsibilities
3	2.4.1	Evaluate impacts of nonnative fish species on bull trout	5	WDFW, USFS, USFWS, NMFS	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Tucannon River Core Area											
Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	2.4.2	Perform feasibility analysis to remove brook trout in Pataha Creek	5	USFS, WDFW, USFWS	10	-	10	-	-	-	Associated with task 2.5.1
3	2.5.1	Determine distribution and abundance of brook trout	5	USFS, WDFW	25	-	25	-	-	-	Associated with task 2.4.2
3	2.5.2	Encourage brook trout harvest in Pataha Creek	25	USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities
3	2.5.3	Implement experimental removal of brook trout	5	USFS, WDFW, USFWS	60	-	-	25	25	10	
3	2.6.1	Evaluate potential impacts from fish competition	4	USFS, WDFW	30	-	-	15	15	-	
3	3.2.4	Minimize incidental bull trout mortality from angler-related hooking and handling	25	WDFW	10	5	-	-	-	-	Educational materials at recreation sites; repeat in year 6
3	3.2.5	Use, review, and revise, where necessary, current management goals for bull trout	5	USFS, WDFW, NMFS	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Tucannon River Core Area											
Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	4.1.3	Perform genetic analyses on brook trout from Pataha Creek to determine whether hybridization between brook trout and bull trout has occurred	5	USFS, USFWS, WDFW	**	-	-	-	-	-	
3	4.1.4	Monitor genetic changes in numbers and life forms to maintain long-term viability of bull trout in the Snake River Washington Recovery Unit.	25	USFWS	***						See Chapter 1.
3	4.3.1	Evaluate the genetic risks and benefits of reintroduction of bull trout	5	USFWS, WDFW	*	-	-	-	-	-	Cost covered by task 7.3.1
3	5.2.2	Determine whether the hydropower system on the lower Snake River is adversely affecting migratory bull trout in the Tucannon River Core Area	10	WDFW, USACE, USFWS	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Tucannon River Core Area											
Task Priority	Task Number	Task description	Task duration (years)	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	5.2.3	Conduct feasibility studies for artificial propagation and/or transplantation and implement programs	3	CTUIR, USFS, USFWS, WDFW	10	-	-	10	-	-	Costs also covered by task 7.3.1
3	6.1.1	Identify partnership opportunities	25	CCD, CTUIR, PCD, USFS, USFWS, BPA, WDFW, SRFB, NGO	*	-	-	-	-	-	Tasks also associated with task 7.3.1
3	6.3.1	Work with involved agencies to modify emergency flood repair regulations that may impact bull trout habitat	25	CCD, GCCD, FHA, USFS	*	-	-	-	-	-	Existing agency responsibilities
3	7.3.2	Periodically review progress toward recovery goals and assess recovery task priorities	25	CCD, CTUIR, PCD, USACE, USFS, USFWS, WDFW	*	-	-	-	-	-	

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Asotin Creek Core Area											
Task Priority	Task Number	Task description	Task duration years	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.1.1	Identify unstable and problem roads causing fine sediment delivery	25	ACCD, USFS, WDOT	10	10	-	-	-	-	Existing agency responsibilities; costs associated with non-agency lands
1	1.1.2	Relocate riparian roads out of the floodplain	25	ACCD, USFS, WDOT	**	-	-	-	-	-	Existing agency responsibilities; costs unknown as each road may require different solutions
1	1.1.3	Find and eliminate fine sediment sources from historical roads	25	ACCD, USFS, WDOT	**	-	-	-	-	-	Existing agency responsibilities; costs unknown as each road may require different solutions
1	1.1.4	Improve routine road maintenance practices	25	ACCD, USFS, WDOT	*	-	-	-	-	-	Existing agency responsibilities
1	1.1.5	Restore stream channels to appropriate channel type	25	ACCD, USFS, WDFW	220	-	-	-	20	200	



Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Asotin Creek Core Area											
Task Priority	Task Number	Task description	Task duration years	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.1.6	Reduce sediment inputs from recreational-based channel damage	25	USFS, WDFW, ACCD, WDNR	*	-	-	-	-	-	Existing agency responsibilities
1	1.1.7	Develop and install educational watershed protection signs in riparian areas of State and Federal campgrounds	3	USFS, WDFW	5	5	-	-	-	-	
1	1.1.8	Review and act on recommendations generated from sediment monitoring plans	25	ACCD, NPT, USFS, WDFW, NRCS	*	-	-	-	-	-	Existing agency responsibilities
1	1.1.9	Assess water quality and remedy impacts from individual residences and communities	25	ACCD, WDOE	*	-	-	-	-	-	Existing agency responsibilities
1	1.1.11	Identify sources and locations of groundwater infiltration to streams	3	ACCD, NRCS, WDFW, WDOE, USFS, USGS	40	20	5	5	5	5	
1	1.1.12	Protect groundwater sources to maintain base flows in Asotin Creek	25	ACCD, EPA, WDOE, WDFW, USFS, NRCS	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Asotin Creek Core Area											
Task Priority	Task Number	Task description	Task duration years	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.1.13	Identify factors contributing to elevated stream temperatures	3	ACCD, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities
1	1.2.1	Remove permanent and seasonal barriers to bull trout migration	25	ACCD, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities
1	1.2.2	Eliminate barriers to bull trout passage at remnant power and irrigation dams	5	ACCD, WDFW, NRCS	*	-	-	-	-	-	Existing agency responsibilities
1	1.2.3	Conduct a complete inventory of surface water diversions	3	ACCD, WDFW, WDNR, WDOE	5	5	-	-	-	-	
1	1.3.1	Conduct watershed analyses to evaluate past, current, and future bull trout production potential	10	WDFW, USFS, USFWS	*	-	-	-	-	-	Focus on critical habitat and associated waters
1	1.3.2	Identify streambanks susceptible to excessive failure and mass wasting	25	ACCD, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities
1	1.3.3	Stabilize streambeds and banks	25	ACCD, NRCS, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Asotin Creek Core Area											
Task Priority	Task Number	Task description	Task duration years	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.3.4	Protect riparian and channel habitat at managed and unmanaged campgrounds, trail systems, and recreation sites	25	USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities
1	1.3.6	Identify and restore riparian vegetation in priority occupied and unoccupied bull trout habitat	25	ACCD, USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities
1	1.3.8	Reduce fine sediment inputs from agricultural land	25	ACCD, WDOE, NRCS	*	-	-	-	-	-	Existing agency responsibilities
1	1.3.9	Maintain roadless conditions in sensitive bull trout watersheds	25	USFS	*	-	-	-	-	-	Existing agency responsibilities
1	1.3.10	Evaluate bridge crossings and assess options to modify structures to protect migration corridors	10	ACCD, USFS, WDOT, FHA	*	-	-	-	-	-	Existing agency responsibilities
1	1.3.12	Promote programs to restore and protect floodplain and channel function	25	ACCD, NRCS, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Asotin Creek Core Area											
Task Priority	Task Number	Task description	Task duration years	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.3.13	Identify and restore aggrading stream channels to restore flow and reduce subsurface flows and increase channel stability	25	ACCD, NRCS, WDFW, WDOE, USFS	10	-	10	-	-	-	Surveys only
1	1.3.15	Reduce stream temperatures by enhancing riparian areas	25	ACCD, EPA, WDFW, WDOE, USFS	*	-	-	-	-	-	Existing agency responsibilities
1	1.3.16	Reduce impacts of livestock on streams and riparian areas	25	ACCD, USFS	*	-	-	-	-	-	Existing agency responsibilities
1	1.4.1	Implement bull trout identification protocol at juvenile and adult fishways at Lower Monumental, Little Goose, and Lower Granite Dams	25	USACE	*	-	-	-	-	-	Existing agency responsibilities
1	1.4.2	Review existing bull trout information and determine limiting factors affecting bull trout at Lower Monumental, Little Goose, and Lower Granite Dams	2	USACE, WDFW, USFWS	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Asotin Creek Core Area											
Task Priority	Task Number	Task description	Task duration years	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.4.3	Identify study needs related to habitats for foraging, migrating, and overwintering in Snake River reservoirs	3	USACE, WDFW, USFWS	*	-	-	-	-	-	
1	3.2.1	Reduce incidental harvest by educating recreational anglers and increasing awareness of bull trout population status	25	WDFW	*	-	-	-	-	-	Existing agency responsibilities
1	3.2.2	Summarize existing bull trout bycatch data and implement angler interviews that target bull trout bycatch	25	WDFW	*	-	-	-	-	-	Existing agency responsibilities
1	3.2.3	Increase enforcement patrols during spawning periods	25	WDFW	2	-	-	-	-	-	Increasing need as migratory bull trout increase in abundance and distribution
1	3.4.1	Continue bull trout harvest closure in the Snake River Washington Recovery Unit	25	WDFW	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Asotin Creek Core Area											
Task Priority	Task Number	Task description	Task duration years	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	4.1.1	Conduct genetic inventory	5	USFS, USFWS, WDFW	15	15	-	-	-	-	
1	4.1.2	Evaluate and describe the genetic structure of bull trout in local populations	5	USFS, USFWS, WDFW	5	5	-	-	-	-	
1	5.2.1	Conduct presence and absence surveys to fully describe the distribution of juvenile, subadult, and adult bull trout	3	USFS, WDFW	60	20	20	20	-	-	
2	1.3.5	Develop and implement comprehensive livestock grazing management plans	25	ACCD, USFS, NRCS	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.11	Incorporate non-intrusive flood repair strategies	25	ACCD, FHA, USFS, WDOT	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.14	Investigate land acquisition as an opportunity to protect bull trout	25	USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities
2	1.3.17	Minimize further development in floodplains	25	ACCD, WDFW, USFS	*	-	-	-	-	-	Existing agency responsibilities

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Asotin Creek Core Area											
Task Priority	Task Number	Task description	Task duration years	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.5.2	Assess current and historical effects of upland management on occupied bull trout streams	5	ACCD, NRCS	*	-	-	-	-	-	Existing agency responsibilities
2	2.1.1	Evaluate potential impacts of hatchery rainbow trout	5	WDFW	*	-	-	-	-	-	Existing agency responsibilities
2	2.4.1	Evaluate impacts of nonnative fish species on bull trout	5	WDFW	*	-	-	-	-	-	Existing agency responsibilities
2	3.2.4	Minimize incidental bull trout mortality from angler-related hooking and handling	25	WDFW	10	5	-	-	-	-	Educational materials at recreation sites; repeat in year 6
2	3.2.5	Use, review, and revise, where necessary, current management goals for bull trout	5	USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities
2	4.3.1	Perform a genetic cost-to-benefit analysis for reintroduction of bull trout	5	USFWS, WDFW	*	-	-	-	-	-	Covered under task 7.3.1

Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Asotin Creek Core Area											
Task Priority	Task Number	Task description	Task duration years	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	5.2.3	Conduct feasibility studies for artificial propagation and/or transplantation and implement programs	5	NPT, USFS, USFWS, WDFW	10	-	-	10	-	-	
2	7.3.2	Periodically review progress toward recovery goals and assess recovery task priorities	25	ACCD, NPT, USACE, USFS, USFWS, WDFW	*	-	-	-	-	-	Existing agency responsibilities
3	1.1.10	Evaluate the need to install additional permanent stream gauging stations	2	WDFW, WDOE, USGS	10	10	-	-	-	-	Costs only for the study
3	1.5.1	Assess effects of upland activities and current upland conditions on stream and riparian function	5	ACCD, NRCS	*	-	-	-	-	-	Existing agency responsibilities
3	1.5.3	Investigate use of prescribed fire	5	USFS	*	-	-	-	-	-	Existing agency responsibilities
3	2.6.1	Evaluate potential impacts from fish competition	5	USFS, WDFW	*	-	-	-	-	-	Existing agency responsibilities



Implementation schedule for the bull trout recovery plan: Snake River Washington Recovery Unit: Asotin Creek Core Area											
Task Priority	Task Number	Task description	Task duration years	Responsible parties	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	6.1.1	Identify partnership opportunities	25	ACCD, BPA, NPT, USFS	*	-	-	-	-	-	Costs covered by task 7.3.1
3	7.3.1	Establish a Snake River Washington Recovery Unit bull trout coordinator	1	USFS, USFWS, WDFW	438	35	35	35	35	35	Permanent position for entire recovery unit; see footnote below

For task 7.3.1, funding for a permanent coordinator position would break down as follows:

- years 1 through 5 - half a full-time equivalent
- years 6 through 15 - one-quarter full-time equivalent
- years 16 through 25 - one-eighth full-time equivalent